Docket No.: 03191/000N075-US0

Application No.: 10/665,380

This listing of claims will replace all prior versions, and listings, of claims in the application:

2

LISTING OF CLAIMS

- 1. (Canceled)
- 2. (Currently amended) A method of ascertaining and regulating shifts of reference position of an actuator-operated clutch in the power train of a motor vehicle wherein the shifts are caused by axial displacements of at least one of the input and output shafts of the clutch relative to the other shaft, comprising:
 - a first step of routinely ascertaining the reference position of the clutch;
- a second step of routinely memorizing and thus actualizing information pertaining to the ascertained reference position;
- a third step of determining operational parameters which initiate shifts of reference position of the clutch;
- a fourth step of conforming said first and second steps to the shifted reference position when the determined operational parameter exceeds a predetermined threshold value; and The method of claim 1, further comprising the
- <u>a fifth</u> step of continuing to memorize and actualize, in the course of and subsequent to said fourth step, that information which is obtained in said second step.
- 3. (Original) The method of claim 2, further comprising the steps of ascertaining and memorizing an emergency reference position while the determined operational parameter is in the process of exceeding the predetermined threshold value, and regulating the actuator for the clutch as a function of the emergency reference position.
- 4. (Currently amended) A method of ascertaining and regulating shifts of reference position of an actuator-operated clutch in the power train of a motor vehicle wherein the shifts are caused by axial displacements of at least one of the input and output shafts of the clutch relative to the other shaft, comprising:

Docket No.: 03191/000N075-US0

Application No.: 10/665,380

a first step of routinely ascertaining the reference position of the clutch;

a second step of routinely memorizing and thus actualizing information pertaining to the ascertained reference position;

3

- a third step of determining operational parameters which initiate shifts of reference position of the clutch;
- a fourth step of conforming said first and second steps to the shifted reference position when the determined operational parameter exceeds a predetermined threshold value; and The method of claim 1 of
- a fifth step of ascertaining and regulating shifts of reference position of an actuator-operated clutch in the power train of a motor vehicle in which the output shaft of the clutch is the torque-transmitting input shaft of a change-speed transmission, wherein said third step includes determining the torque which is being transmitted by the output shaft of the clutch.

5. (Canceled)

- 6. (Currently amended) A method of ascertaining and regulating shifts of reference position of an actuator-operated clutch in the power train of a motor vehicle wherein the shifts are caused by axial displacements of at least one of the input and output shafts of the clutch relative to the other shaft, comprising:
 - a first step of routinely ascertaining the reference position of the clutch;
- a second step of routinely memorizing and thus actualizing information pertaining to the ascertained reference position;
- a third step of determining operational parameters which initiate shifts of reference position of the clutch;
- a fourth step of conforming said first and second steps to the shifted reference position when the determined operational parameter exceeds a predetermined threshold value; and
- a fifth step of establishing a hydraulic force transmitting path between the actuator and the clutch; The method of claim 5,

wherein said first step includes a snifting operation.

Application No.: 10/665,380 4 Docket No.: 03191/000N075-US0

7. (Original) The method of claim 6, wherein said first and second steps are carried out at regular intervals as long as the operational parameter is below said predetermined threshold value, and further comprising the step of carrying out at least one emergency snifting operation to thus ascertain an emergency engagement condition of the clutch when the operational parameter exceeds said predetermined threshold value.

- 8. (Original) The method of claim 7, wherein said third step includes determining the torque being transmitted by the output shaft of the clutch and further comprising the steps of (a) ascertaining and memorizing an emergency reference position while the determined operational parameter is in the process of exceeding said predetermined threshold value and (b) setting the engagement stage of the clutch to coincide with the memorized emergency reference position when the torque decreases below the predetermined threshold value.
- 9. (Original) The method of claim 8, further comprising the steps of memorizing at least one torque being transmitted by the output shaft of the clutch while the determined operational parameter is below the predetermined threshold value, and reactivating the memorized at least one torque upon renewed drop of the torque below the predetermined threshold value.
- 10. (Original) An arrangement for regulating the shift of a reference position of an actuator-operated torque-transmitting clutch in the power train of a motor vehicle wherein the shift is caused by axial movements of at least one of an input shaft of the clutch and an output shaft of the clutch relative to the other thereof, comprising:
- a connection between a mobile multiple-position force-transmitting operating member of the actuator and a displaceable clutch setting member;
 - a control unit for the actuator;
- a plurality of signal-transmitting monitoring devices operatively connected with said control unit and including a sensor arranged to transmit to the control unit signals denoting the positions of said operating member;

Docket No.: 03191/000N075-US0

Application No.: 10/665,380

means for ascertaining the force being transmitted by said operating member to displace

said setting member; and

means for monitoring the torque being transmitted by said clutch, said control unit being arranged to routinely ascertain the reference position of said clutch, to routinely memorize and to thus actualize information pertaining to the ascertained reference position, to determine operational parameters which initiate shifts of reference position of the clutch, and to conform the reference position and the memorized information to the shifted reference position when the

5

determined operational parameter exceeds a predetermined threshold value.

11. (Original) The arrangement of claim 10, wherein the output shaft of said clutch is the

input shaft of a change-speed transmission in the power train.

12. (Original) The arrangement of claim 10, wherein said connection comprises a

hydraulic system between a mobile motor-operated member and a clutch-operating member of

the actuator.

13. (Original) The arrangement of claim 12, wherein said mobile motor-operated member

includes a reciprocable piston and said clutch-operating member includes a pivotable member.

14. (Original) The arrangement of claim 13, wherein said hydraulic system further

includes a master cylinder reciprocably receiving said piston and having a snifting orifice

adjacent a path for said piston.

15. (Original) The arrangement of claim 14, wherein said motor is operable to move said

piston relative to said orifice.

16. (Original) The arrangement of claim 15, wherein said motor includes a stepping

motor.

Application No.: 10/665,380 6 Docket No.: 03191/000N075-US0

17. (Original) The arrangement of claim 16, wherein said sensor includes means for transmitting to said control unit signals denoting the position of said motor-operated member relative to said orifice.

18. (Original) The arrangement of claim 10, wherein said clutch is a friction clutch and said power train further comprises an internal combustion engine having a rotary output member connected with said input shaft.

19. (Original) The arrangement of claim 10, wherein said control unit includes at least one memory for signals from said monitoring devices.

20. (Original) The arrangement of claim 19, wherein said at least one memory includes means for storing regularly transmitted signals generated by said monitoring devices and signals generated by at least one of said monitoring devices under special circumstances of operation of said clutch.